Fig. 1

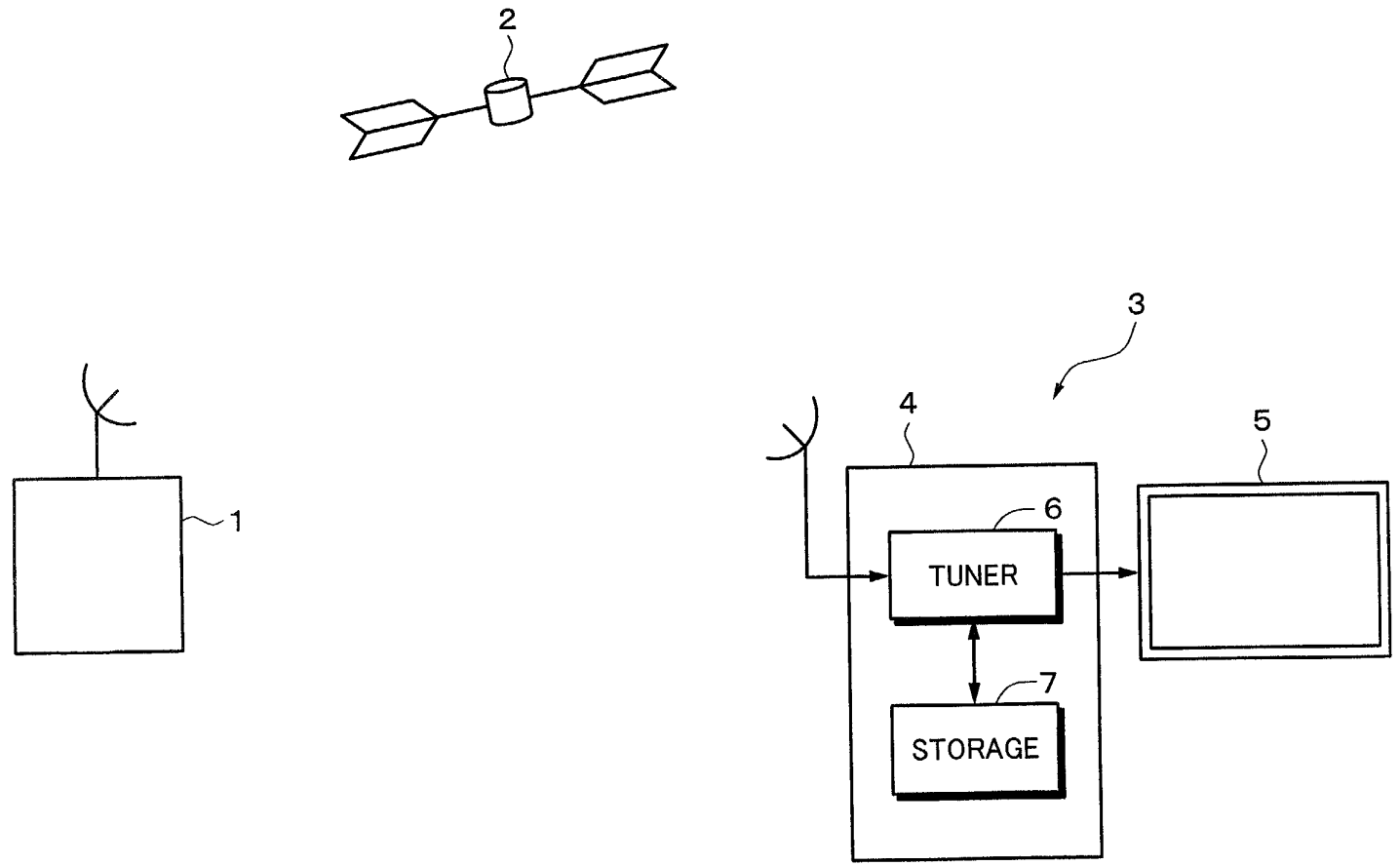
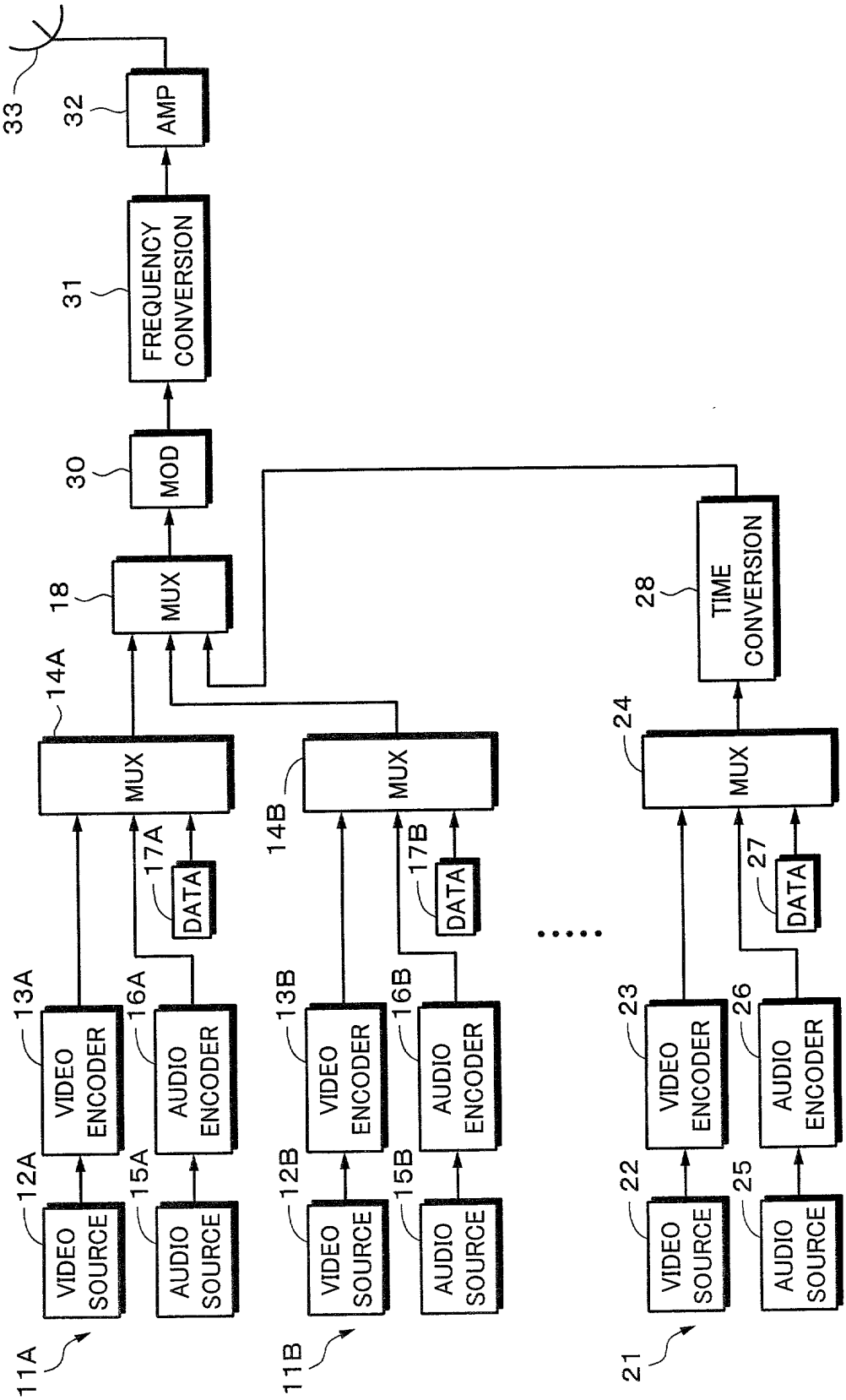


Fig. 2


11A
VIDEO SOURCE
12A
VIDEO ENCODER
13A
AUDIO SOURCE
15A
AUDIO ENCODER
16A
DATA
17A
MUX
14A
11B
VIDEO SOURCE
12B
VIDEO ENCODER
13B
AUDIO SOURCE
15B
AUDIO ENCODER
16B
DATA
17B
MUX
14B
21
VIDEO SOURCE
22
VIDEO ENCODER
23
AUDIO SOURCE
25
AUDIO ENCODER
26
DATA
27
MUX
24
TIME CONVERSION
28
MUX
18
MOD
30
FREQUENCY CONVERSION
31
AMP
32
33

Translation Searched

Fig. 3

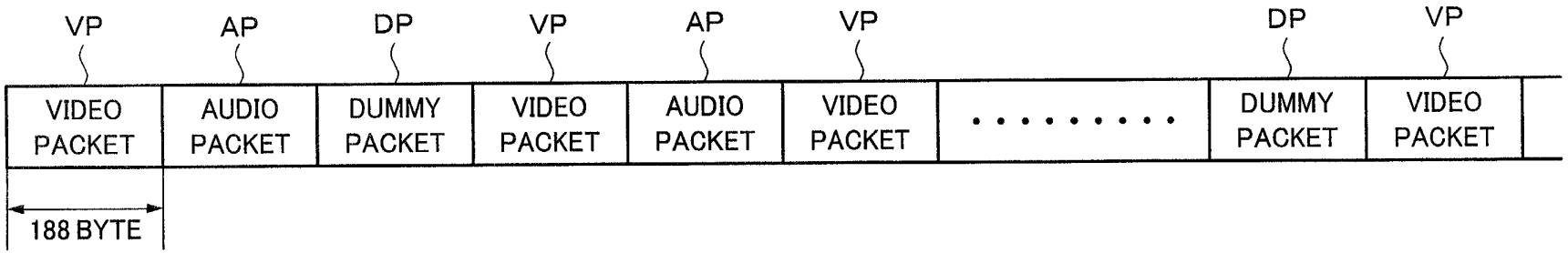


Fig. 4

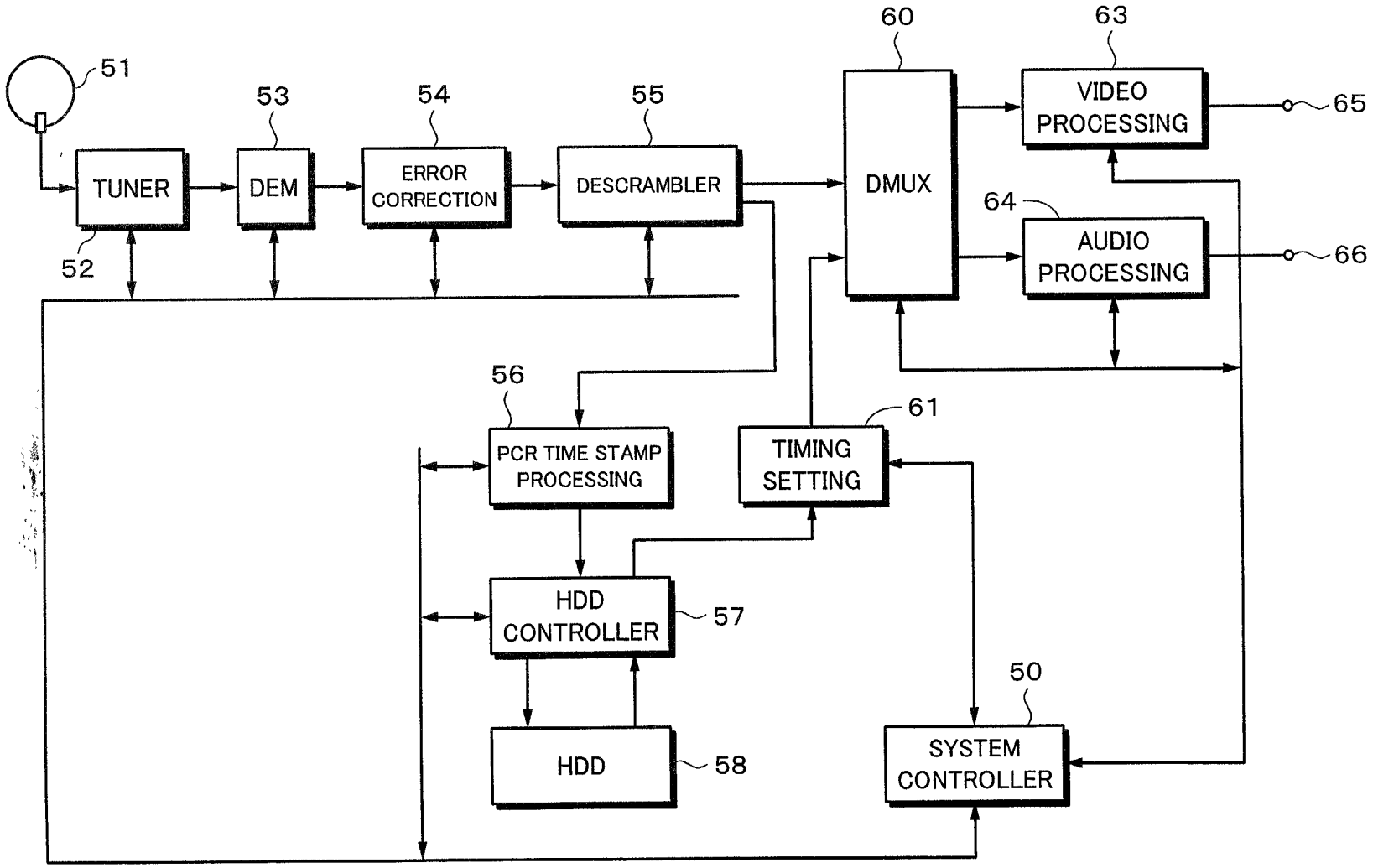
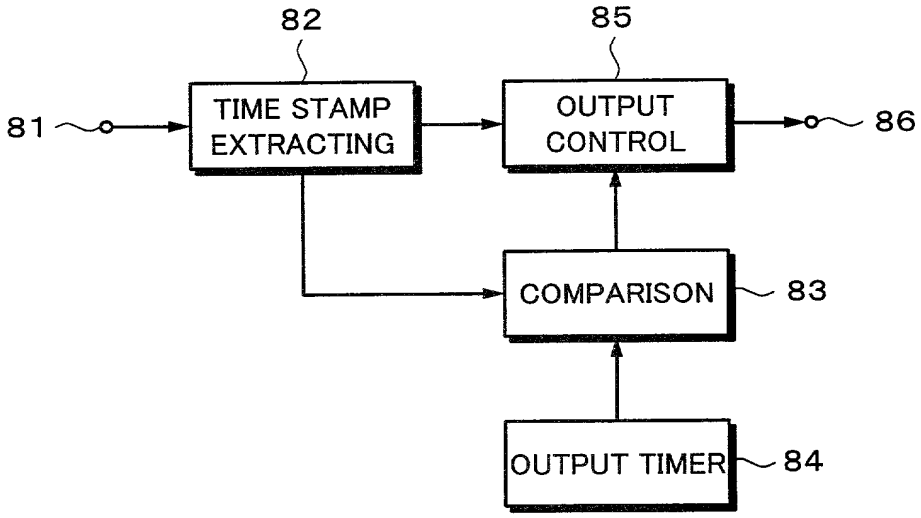

51
53
54
55
60
63
TUNER
DEM
ERROR CORRECTION
DESCRAMBLER
DMUX
VIDEO PROCESSING
65
64
AUDIO PROCESSING
66
52
56
61
PCR TIME STAMP PROCESSING
TIMING SETTING
HDD CONTROLLER
57
50
HDD
58
SYSTEM CONTROLLER

Fig. 5


82
85
81
TIME STAMP EXTRACTING
OUTPUT CONTROL
86
COMPARISON
83
OUTPUT TIMER
84

FOREIGN PATENT

Fig. 6

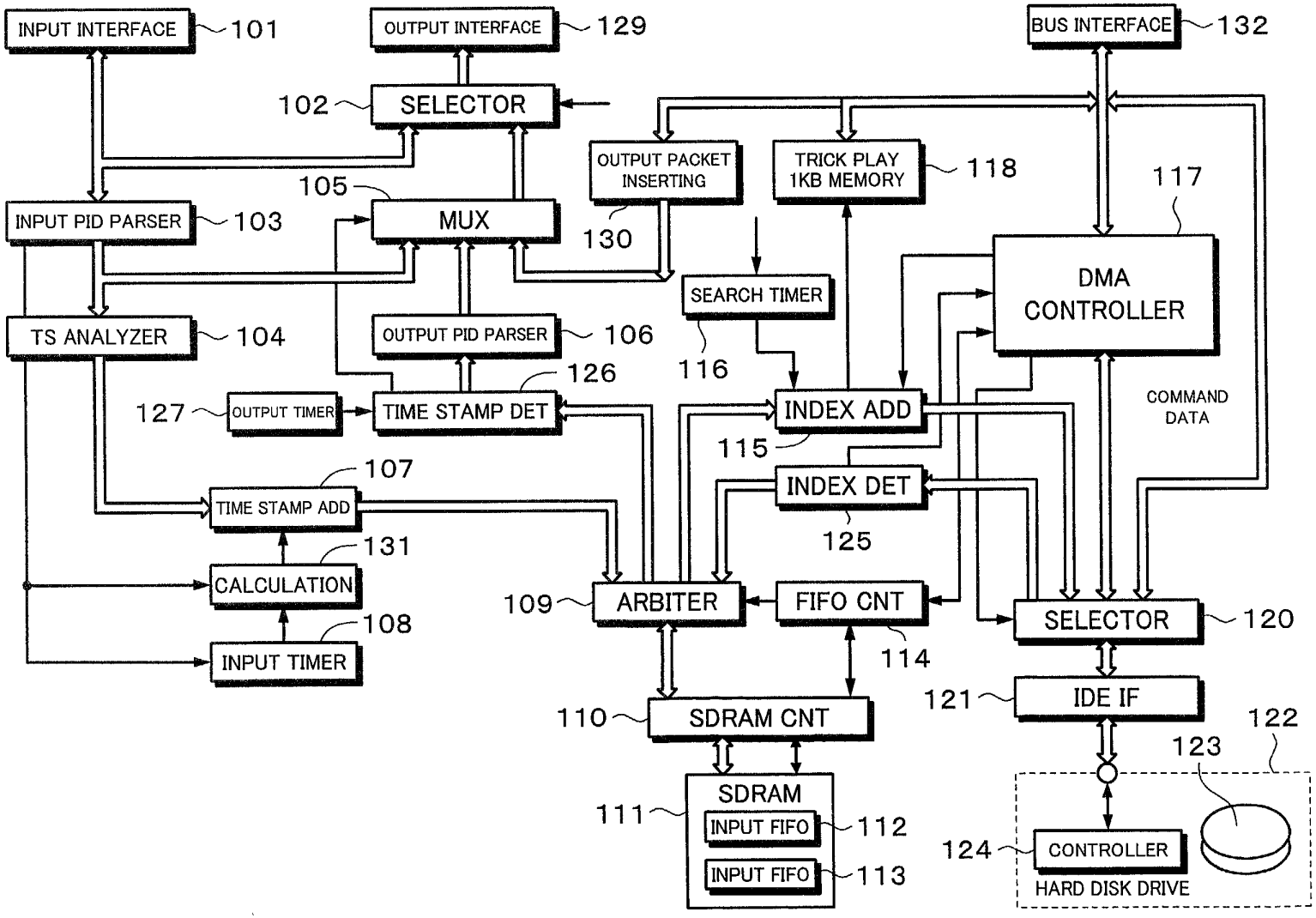


Fig. 7A

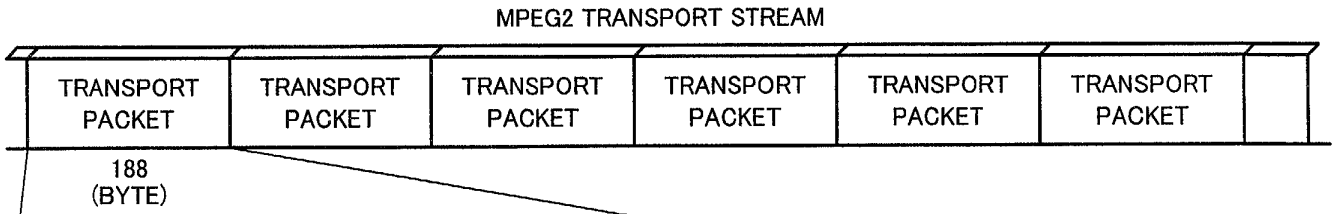


Fig. 7B

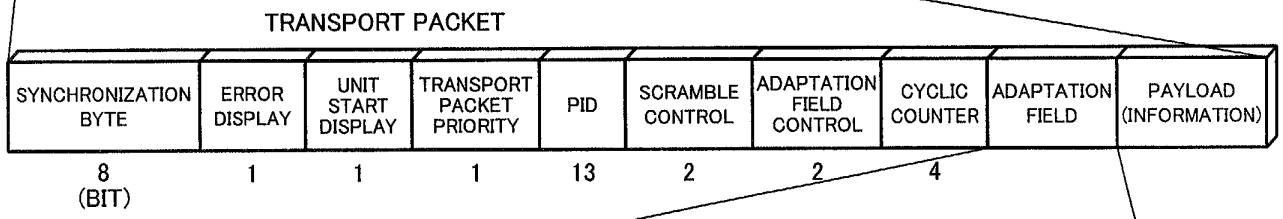


Fig. 7C

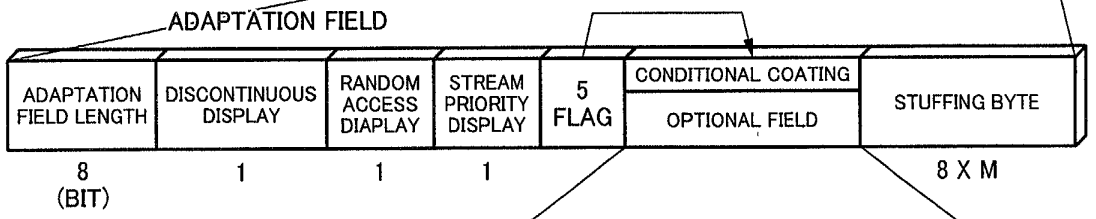


Fig. 7D

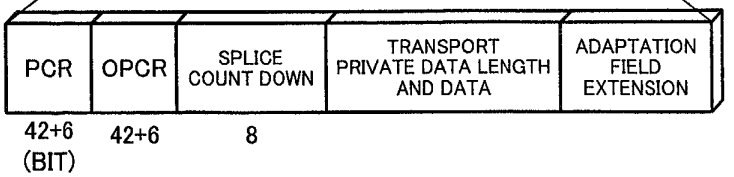


Fig. 8

	value	No. of Bits
adaptation_field(){		
adaptation_field_length=	183	8
flags :		
discontinuity_indicator=	0	1
random_access_indicator=	0	1
elementary_stream_priority_indicator=	0	1
PCR_flag=	1	1
OPCR_flag=	0	1
splicing_point_flag=	0	1
transport_private_data_flag=	0	1
adaptation_field_extension_flag=	0	1
PCR :		
program_clock_reference_base=	x	33
reserved=	0	6
program_clock_reference_extension=	0	9
stuffing :		
for(i=0; i<n; i++){		
stuffing_Byte	0	8
}		

Fig. 9

	value	No. of Bits
adaptation_field(){		
adaptation_field_length=	183	8
flags :		
discontinuity_indicator=	0	1
random_access_indicator=	0	1
elemtary_stream_priority_indicator=	0	1
PCR_flag=	0	1
OPCR_flag=	0	1
splicing_point_flag=	0	1
transport_private_data_flag=	1	1
adaptation_field_extension_flag=	0	1
transport_private_data :		
transport_private_data_length=	7	8
Dummy PCR:		
dummy_program_clock_reference_base=	x	33
dummy_reserved=	0	6
dummy_program_clock_reference_extension=	0	9
Dummy Ratio :		
output_ratio_int=	x	5
output_ratio_decimal=	x	12
output_ratio_reserved=	0	7
stuffing :		
for(i=0; i<n; i++){		
stuffing_Byte	0	8
}		

Fig. 10

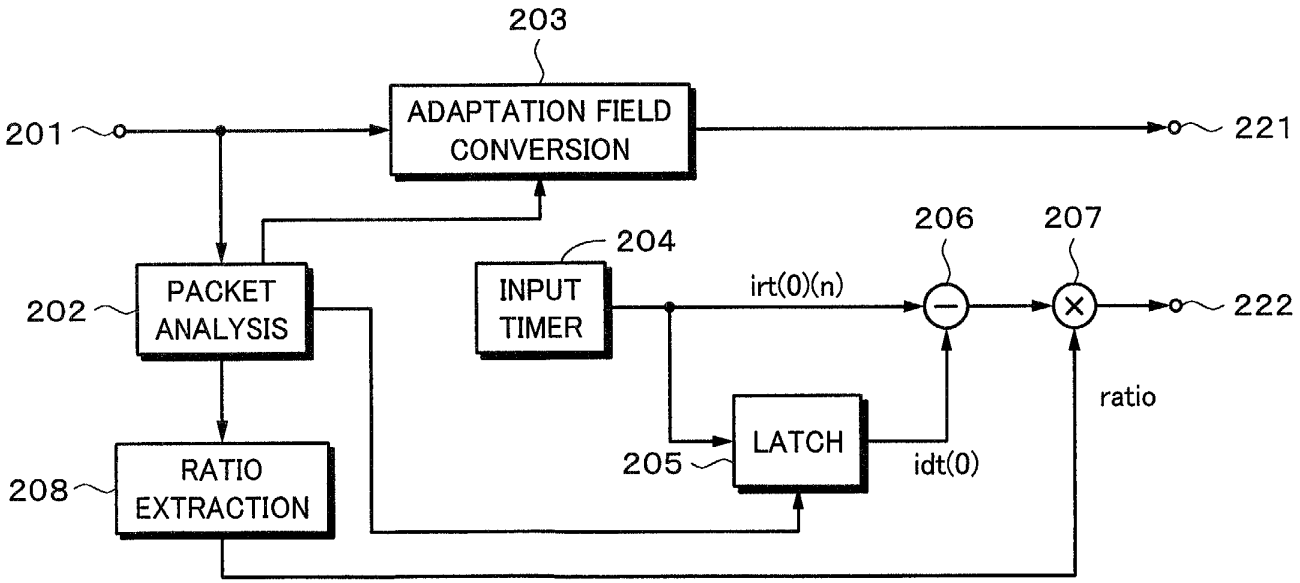

203
ADAPTATION FIELD CONVERSION
201
221
206
207
204
PACKET ANALYSIS
202
INPUT TIMER
irt(0)(n)
222
ratio
LATCH
205
idt(0)
RATIO EXTRACTION
208

Fig. 11

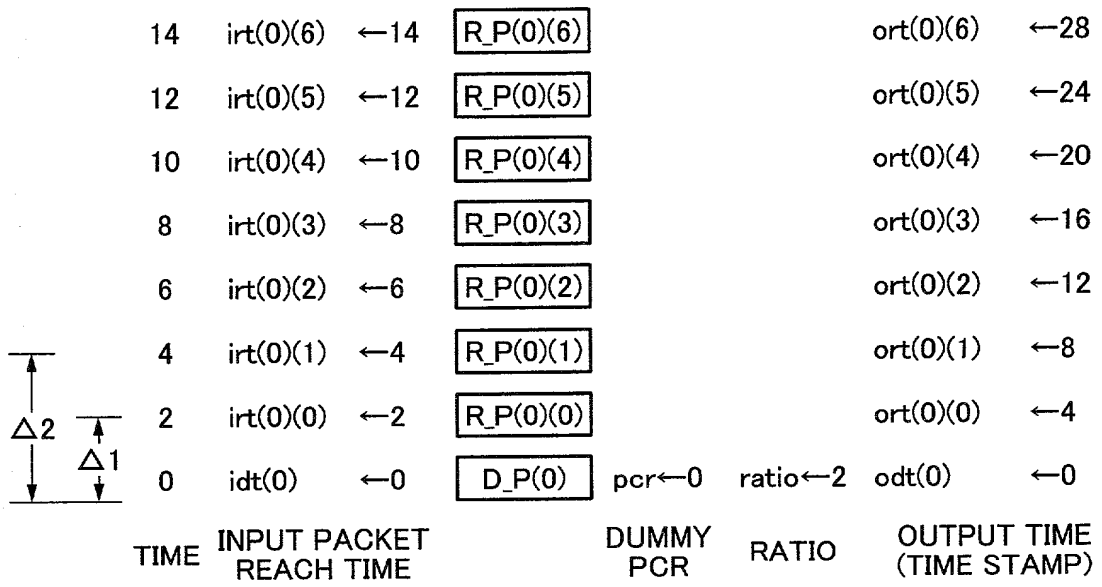

14 irt(0)(6) ←14 R_P(0)(6) ort(0)(6) ←28
12 irt(0)(5) ←12 R_P(0)(5) ort(0)(5) ←24
10 irt(0)(4) ←10 R_P(0)(4) ort(0)(4) ←20
8 irt(0)(3) ←8 R_P(0)(3) ort(0)(3) ←16
6 irt(0)(2) ←6 R_P(0)(2) ort(0)(2) ←12
4 irt(0)(1) ←4 R_P(0)(1) ort(0)(1) ←8
2 irt(0)(0) ←2 R_P(0)(0) ort(0)(0) ←4
0 idt(0) ←0 D_P(0) pcr←0 ratio←2 odt(0) ←0
Δ2
Δ1
TIME
INPUT PACKET REACH TIME
DUMMY PCR
RATIO
OUTPUT TIME (TIME STAMP)

Fig. 12

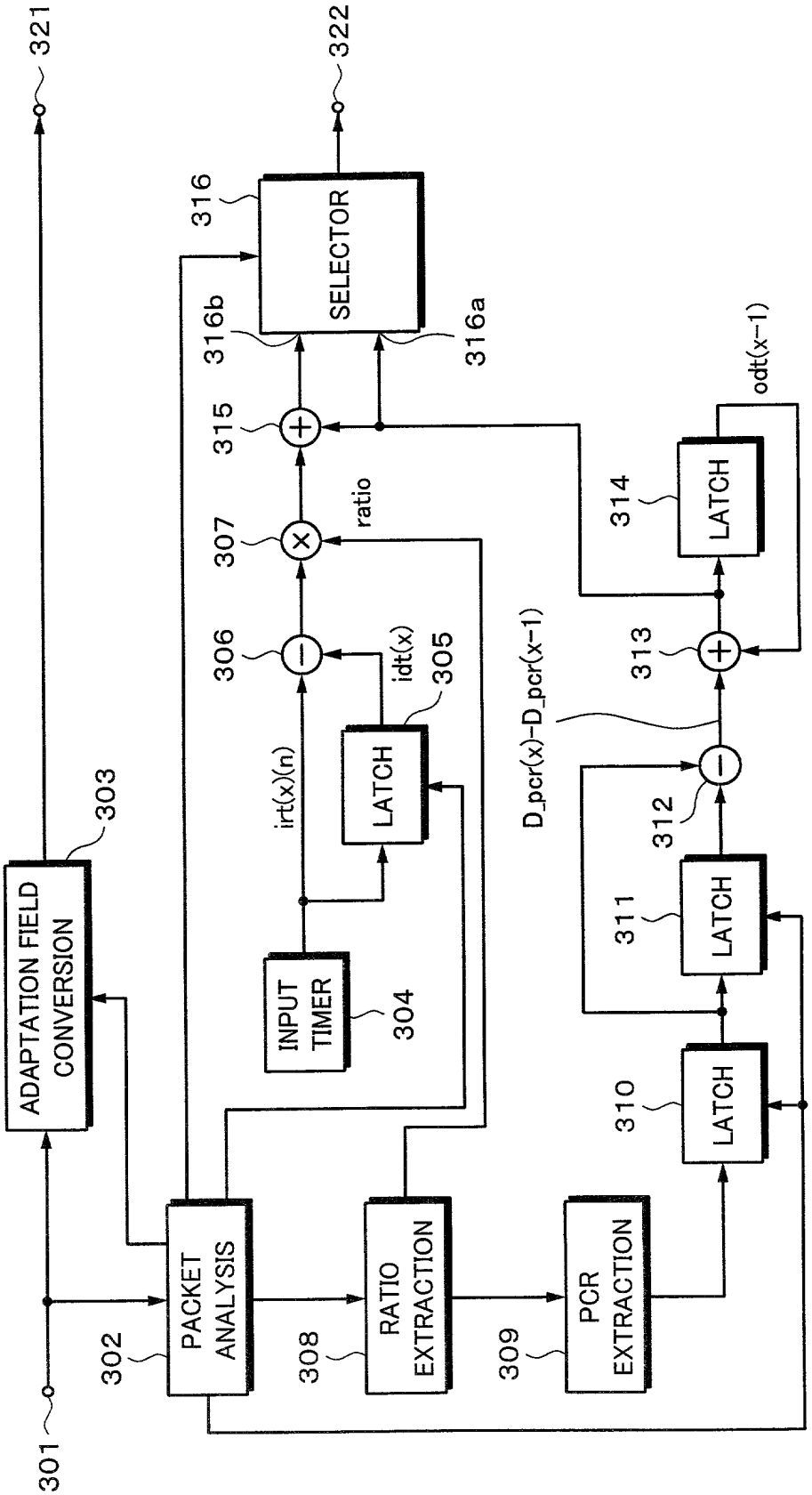

301
302
PACKET ANALYSIS
303
ADAPTATION FIELD CONVERSION
304
INPUT TIMER
305
LATCH
306
307
308
RATIO EXTRACTION
309
PCR EXTRACTION
310
LATCH
311
LATCH
312
313
LATCH
314
315
316
SELECTOR
316a
316b
321
322
irt(x)(n)
idt(x)
ratio
D_pcr(x)-D_pcr(x-1)
odt(x-1)

Fig. 13

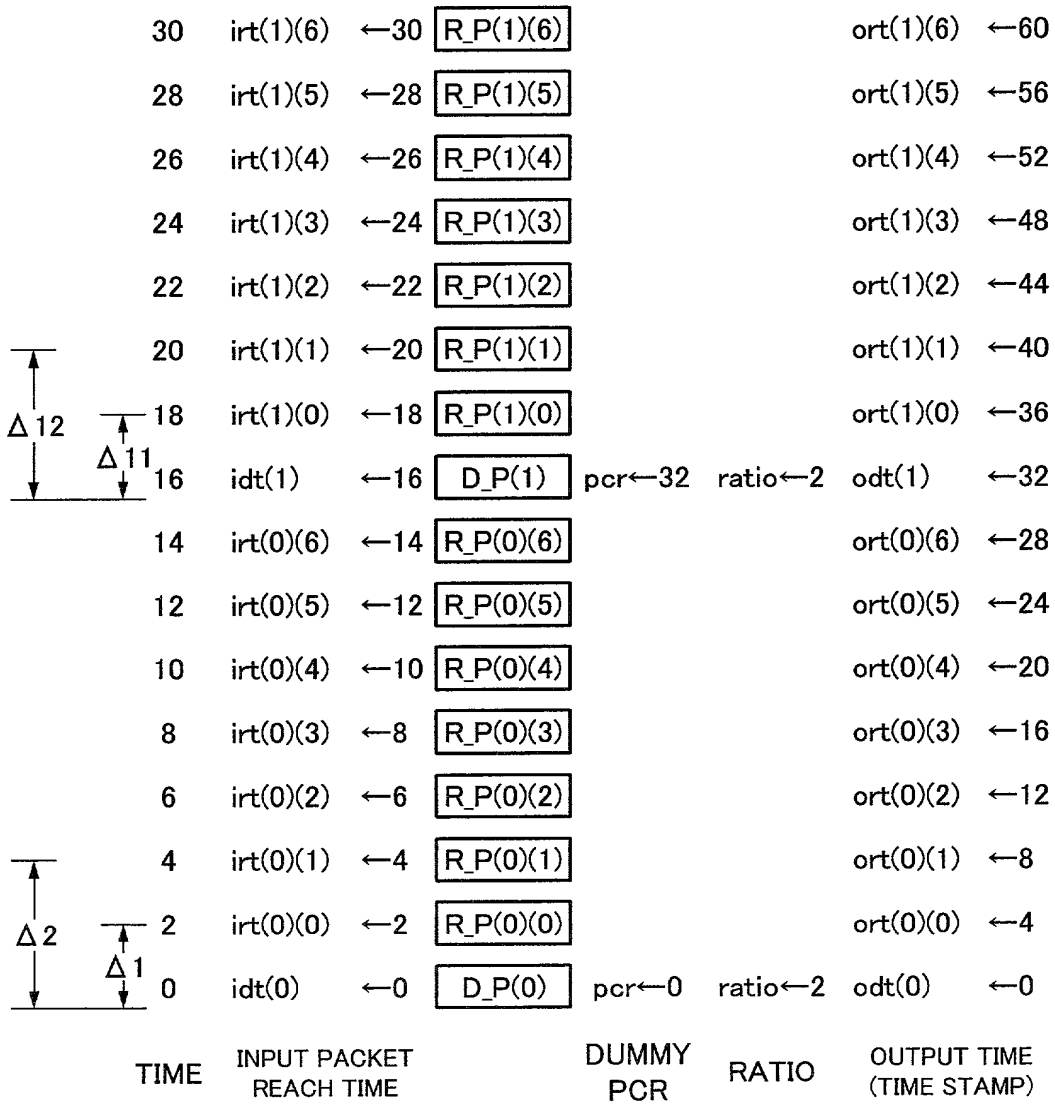

30 irt(1)(6) ←30 R_P(1)(6) ort(1)(6) ←60
28 irt(1)(5) ←28 R_P(1)(5) ort(1)(5) ←56
26 irt(1)(4) ←26 R_P(1)(4) ort(1)(4) ←52
24 irt(1)(3) ←24 R_P(1)(3) ort(1)(3) ←48
22 irt(1)(2) ←22 R_P(1)(2) ort(1)(2) ←44
20 irt(1)(1) ←20 R_P(1)(1) ort(1)(1) ←40
18 irt(1)(0) ←18 R_P(1)(0) ort(1)(0) ←36
16 idt(1) ←16 D_P(1) pcr←32 ratio←2 odt(1) ←32
14 irt(0)(6) ←14 R_P(0)(6) ort(0)(6) ←28
12 irt(0)(5) ←12 R_P(0)(5) ort(0)(5) ←24
10 irt(0)(4) ←10 R_P(0)(4) ort(0)(4) ←20
8 irt(0)(3) ←8 R_P(0)(3) ort(0)(3) ←16
6 irt(0)(2) ←6 R_P(0)(2) ort(0)(2) ←12
4 irt(0)(1) ←4 R_P(0)(1) ort(0)(1) ←8
2 irt(0)(0) ←2 R_P(0)(0) ort(0)(0) ←4
0 idt(0) ←0 D_P(0) pcr←0 ratio←2 odt(0) ←0
Δ12
Δ11
Δ2
Δ1
TIME
INPUT PACKET REACH TIME
DUMMY PCR
RATIO
OUTPUT TIME (TIME STAMP)

Fig. 14

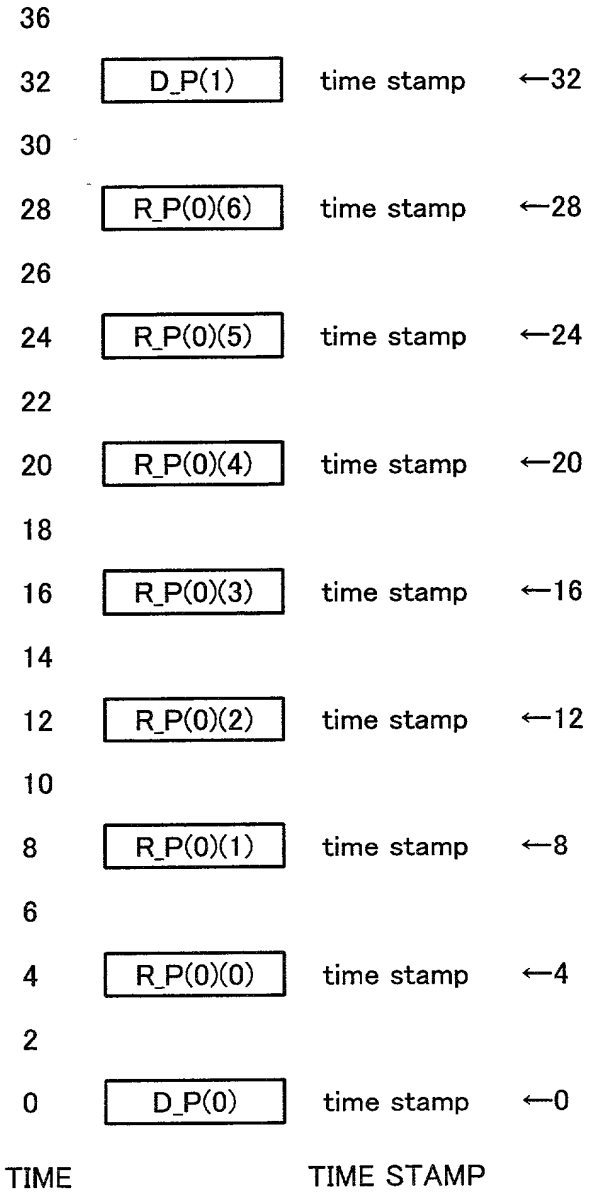

36
32
D_P(1)
time stamp
←32
30
28
R_P(0)(6)
time stamp
←28
26
24
R_P(0)(5)
time stamp
←24
22
20
R_P(0)(4)
time stamp
←20
18
16
R_P(0)(3)
time stamp
←16
14
12
R_P(0)(2)
time stamp
←12
10
8
R_P(0)(1)
time stamp
←8
6
4
R_P(0)(0)
time stamp
←4
2
0
D_P(0)
time stamp
←0
TIME
TIME STAMP

Fig. 15

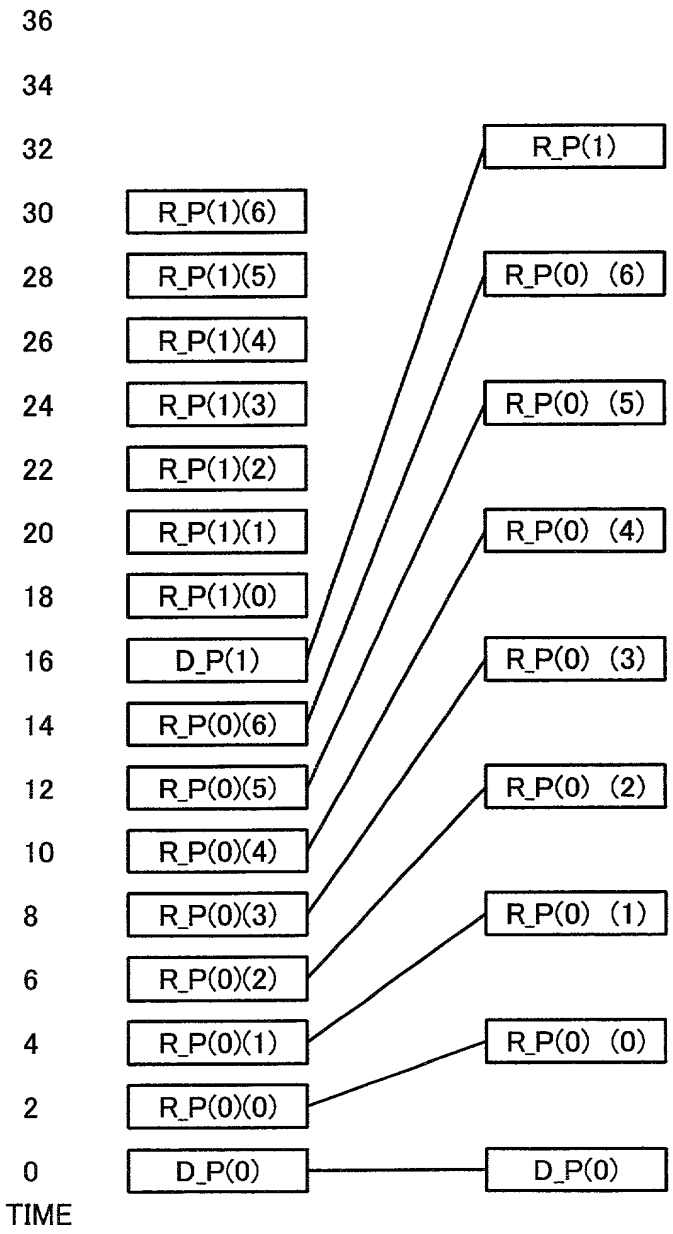

36
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
TIME
R_P(1)(6)
R_P(1)(5)
R_P(1)(4)
R_P(1)(3)
R_P(1)(2)
R_P(1)(1)
R_P(1)(0)
D_P(1)
R_P(0)(6)
R_P(0)(5)
R_P(0)(4)
R_P(0)(3)
R_P(0)(2)
R_P(0)(1)
R_P(0)(0)
D_P(0)
R_P(1)
R_P(0) (6)
R_P(0) (5)
R_P(0) (4)
R_P(0) (3)
R_P(0) (2)
R_P(0) (1)
R_P(0) (0)
D_P(0)

Fig. 16

TIME	INPUT PACKET REACH TIME			DUMMY PCR	RATIO	OUTPUT TIME (TIME STAMP)	
18	irt(1)(2)	←18	R_P(1)(2)			ort(1)(2)	←9
17							
16	irt(1)(1)	←16	R_P(1)(1)			ort(1)(1)	←8
15							
14	irt(1)(0)	←14	R_P(1)(0)			ort(1)(0)	←7
13							
12	idt1	←12	D_P(1)	pcr←6	ratio←$\frac{1}{2}$	odt(1)	←6
11							
10	irt(0)(4)	←10	R_P(0)(4)			ort(0)(4)	←5
9							
8	irt(0)(3)	←8	R_P(0)(3)			ort(0)(3)	←4
7							
6	irt(0)(2)	←6	R_P(0)(2)			ort(0)(2)	←3
5							
4	irt(0)(1)	←4	R_P(0)(1)			ort(0)(1)	←2
3							
2	irt(0)(0)	←2	R_P(0)(0)			ort(0)(0)	←1
1							
0	idt0	←0	D_P(0)	pcr←0	ratio←$\frac{1}{2}$	odt(0)	←0

Fig. 17

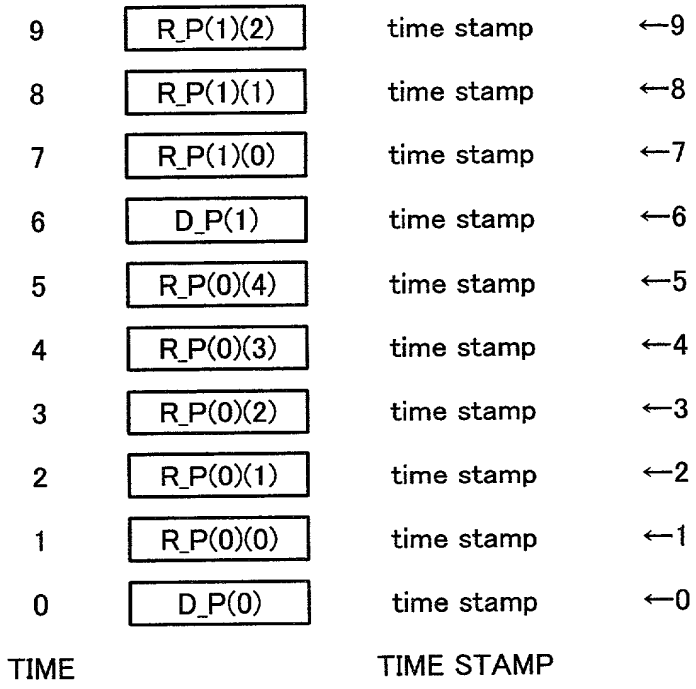
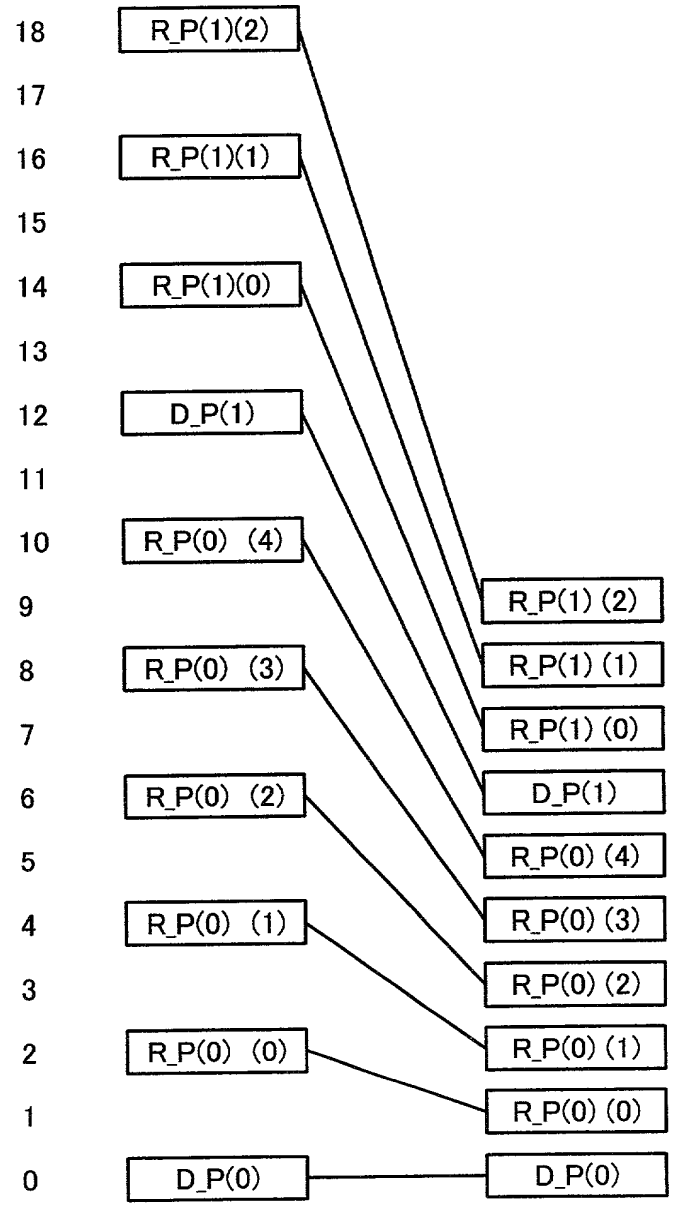

9
R_P(1)(2)
time stamp
←9
8
R_P(1)(1)
time stamp
←8
7
R_P(1)(0)
time stamp
←7
6
D_P(1)
time stamp
←6
5
R_P(0)(4)
time stamp
←5
4
R_P(0)(3)
time stamp
←4
3
R_P(0)(2)
time stamp
←3
2
R_P(0)(1)
time stamp
←2
1
R_P(0)(0)
time stamp
←1
0
D_P(0)
time stamp
←0
TIME
TIME STAMP

Fig. 18


18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
TIME
R_P(1)(2)
R_P(1)(1)
R_P(1)(0)
D_P(1)
R_P(0) (4)
R_P(0) (3)
R_P(0) (2)
R_P(0) (1)
R_P(0) (0)
D_P(0)
R_P(1) (2)
R_P(1) (1)
R_P(1) (0)
D_P(1)
R_P(0) (4)
R_P(0) (3)
R_P(0) (2)
R_P(0) (1)
R_P(0) (0)
D_P(0)